# WORK PLAN
# TCE AND BENZENE PLUMES DATA ACQUISITION

**INITIAL REMEDIAL DESIGN WORK**
**DUAL SITE GROUNDWATER OPERABLE UNIT**

**JOINT MONTROSE CHEMICAL AND**
**DEL AMO SUPERFUND SITE**
**LOS ANGELES, CALIFORNIA**

**DSGWRD 0936-002, 0936-005, and 0936-010**

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# DSGWRD 0936-002, -005, -010

## 1.0 INTRODUCTION AND BACKGROUND

Presented in this document is a work plan for TCE and benzene plume data acquisition in the groundwater operable unit for the joint Montrose Chemical and Del Amo Superfund Site. This document is presented pursuant to the requirements of a September 3, 2003 Unilateral Administrative Order (UAO) for Initial Remedial Design Work (U.S. EPA Docket No. 2003-08) and its Enforceable Statement of Work for the Groundwater Operable Unit at the joint site. More specifically, this work plan addresses several pre-design work requirements presented in the UAO, including (1) Preparation of a Work Plan, Field Sampling Plan (FSP), and Quality Assurance Project Plan (QAPP) for TCE Plume data acquisition; (2) Preparation of a Work Plan, FSP and QAPP for benzene plume data acquisition in the Middle Bellflower C Sand (MBFC); and (3) Preparation of a Compilation and Update of Other Sources Data Report (Appendix A). With EPA's approval, these three elements are combined into this single document.

The former Montrose Chemical and former rubber plant sites are located near the intersection of the 405 and 110 freeways in the Harbor Gateway portion of Los Angeles, California (Figure 1). The Montrose and Del Amo sites are currently independent Superfund sites with separate histories, but are considered a joint site by EPA with respect to the groundwater operable unit and associated remedial design investigations. Multiple sources of groundwater contamination are present in the area, some of which are unrelated to either the Montrose or the Del Amo site. The principal groundwater contaminants present at the joint site include chlorobenzene, DDT, para-chlorobenzene sulfonic acid (pCBSA), benzene, ethylbenzene, trichloroethylene (TCE), and tetrachloroethene (PCE).

## 2.0 INVESTIGATION PURPOSE AND SCOPE

The purpose of the proposed investigation is to collect groundwater data sufficient for (1) characterizing the TCE plume and associated source areas that may have an impact on remedial design or action; and (2) evaluating the potential presence and distribution of benzene within the MBFC in the vicinity of the existing MCC-Hamilton Place LLC building (former WRC building) near the eastern boundary of the former rubber plant.

For the purposes of this work plan, "the TCE plume" refers to the area where dissolved TCE, PCE and their degradation products are present, but excluding the area where they are commingled with chlorobenzene. This is equivalent to the TCE plume as defined in the ROD. Investigation of the TCE plume will focus on contamination entering the

former rubber plant from the "Normandie Strip" area (bounded by 190th Street, the western boundary of the former rubber plant, the LADWP right-of-way, and Normandie Avenue to the north, east, south, and west, respectively) and on contributions from sources within and downgradient of the former rubber plant that may have an impact on remedial design and action.

The investigation will include the following tasks:

**TCE plume:**

- Completion and development of one UBF (water table) monitoring well, two MBFC monitoring wells, and one Gage aquifer well to further characterize the lateral and vertical extent of the TCE plume near the western boundary of the former rubber plant;

- Two rounds of sampling for each new well;

- Laboratory analysis of the groundwater samples for VOCs; and

- Review and evaluation of the data with respect to the stated objectives.

**Benzene plume:**

- Completion and development of one monitoring well penetrating the merged MBFB/MBFC near the eastern boundary of the former rubber plant to evaluate the vertical extent of the benzene plume;

- Two rounds of sampling for the new well;

- One round of sampling of existing water table well SWL0021 to confirm that the benzene plume associated with the source area near well XMW-01HD does not extend further south than previously interpreted;

- Laboratory analysis of groundwater samples from the proposed benzene plume well and existing well SWL0021 for VOCs; and

- Review and evaluation of the data with respect to the stated objectives.

Following completion of all monitoring wells, sampling, and receipt and validation of laboratory data, a completion report will be prepared summarizing the TCE and benzene plume investigations, the findings, conclusions, and recommendations for further investigation, as appropriate.

Details regarding the rationale, proposed sampling locations, analytical program, and procedures for the above tasks are described below.

## 3.0 INVESTIGATION RATIONALE

### 3.1 TCE PLUME

The approximate extent of the TCE plume in the water table, MBFB, MBFC, and Gage aquifers is presented on Figures 2 through 5, respectively. The plume representations are based upon data from the 2004 baseline sampling event, with the outer boundary of the plume defined by either drinking water MCLs (5 µg/l for both TCE and PCE) or the edge of the chlorobenzene plume. The area of commingled chlorobenzene and TCE/PCE is considered part of the chlorobenzene plume and not the TCE plume, as defined in the ROD.

#### 3.1.1 Water Table Zone

Additional characterization of the TCE plume in the water table zone (Figure 2) will be limited to installation of a single well along the western boundary of the former plant site. The well location is shown on Figure 2 as "Well #1", indicating it will be the first well completed. The purpose of the proposed well will be to provide further data by which to evaluate the potential contribution of the "pits and trenches" feature at the former plant site to the TCE plume. Groundwater samples from Well #1 will be analyzed for VOCs using EPA Method 8260B.

The proposed well location is within property owned and occupied by RR Donnelley. There is a current access agreement for this parcel, and no insurmountable access issues to the area are anticipated.

Further characterization of other water table TCE plume areas is not planned. The offsite TCE plume area that is south of the southeastern corner of the former rubber plant (vicinity of well SWL0021) is inferred to be associated with a former landfill and is present at relatively low concentrations (maximum TCE or PCE concentration is 15 µg/l) that are unlikely to significantly affect remedial design. Further characterization is similarly not warranted for the small plume areas in the vicinity of wells SWL0016 and XP-02. The source for these two plume areas is unclear, but concentrations are low to moderate, and are not increasing through time at any of the wells where detectable concentrations occur. The dissolved chlorinated solvent contamination in these areas is unlikely to migrate out of the technical impracticability (TI) waiver zone, nor will it significantly affect remedial design.

### 3.1.2 Middle Bellflower B Sand

The TCE plume in the MBFB is limited to the western portion of the former plant site and areas further west. This portion of the MBFB and the associated monitoring wells are equivalent to the water table. In accordance with the discussion in Section 3.1.1 above, no further characterization is judged to be necessary.

### 3.1.3 Middle Bellflower C Sand

Relatively high concentrations of chlorinated solvents (TCE = 3600 µg/l, PCE = 1100 µg/l) are known to be present at well SWL0054 within the MBFC (Figure 4). The source area for this portion of the TCE plume is inferred to be the former Trico Industries (currently PACCAR) facility immediately west of the former rubber plant site boundary, based on highly elevated chlorinated solvent concentrations in the water table zone and the upgradient location of the facility relative to well SWL0054. An MBFC well is proposed along the former rubber plant site boundary ("Well #2" on Figure 4), downgradient from the Trico site, to confirm the offsite source and further characterize the plume distribution.

The location of the proposed Well #2 is within property owned and occupied by the Coca-Cola Company. There is a current access agreement for this parcel, and no significant access issues are anticipated for this location. A potential alternate location for this well is within the adjacent (immediately north) R.R. Donnelley property. There is also a current access agreement for the Donnelley property.

Groundwater samples from Well #2 will be analyzed for VOCs using EPA Method 8260B. The VOC data from will be evaluated prior to making a final decision regarding the need and location of any additional wells pertaining to the TCE plume. Assuming that the data from Well #2 are consistent with a source area at the former Trico facility and adequately explain the existing data at SWL0054, a second MBFC well will be completed for additional delineation of the eastern margin of the TCE plume.

The additional plume delineation well ("Well #4" on Figure 4) will be located adjacent to Pacific Gateway, on property owned by Torrance Gateway Associates. No significant problems are anticipated with respect to gaining access to this property for the well installation.

In the event that chlorinated solvent concentrations at well #2 are too low to explain the high concentrations at SWL0054 (Figure 4), the location of Well #4 will be reconsidered. An alternative location for the second MBFC well is not presented in this work plan, but will be considered and discussed with EPA in the context of the data at well #2. The need and location for an additional MBFC well to evaluate the eastern boundary of the plume would be similarly evaluated after data from the initial well are received. Agreement on

any alternative well locations will be obtained from the agencies prior to commencement of drilling activities at the alternate locations.

### 3.1.4 Gage Aquifer

Figure 5 indicates that the Gage aquifer TCE plume is reasonably well delineated. However, a TCE source area is inferred to exist near the western plant site boundary, as discussed above. Contamination from this source area has penetrated vertically to at least the MBFC, as indicated by data for well SWL0054, and could conceivably have entered the Gage in an area that would not be reflected in data from existing Gage monitoring wells. An additional Gage well is therefore planned to address this data gap and further evaluate the vertical extent of the TCE plume near the western plant site boundary. The Gage well (Well #5 on Figure 5) will be collocated with Well #2 (MBFC), assuming high chlorinated solvent concentrations are detected at Well #2. Alternatively, if concentrations in the MBFC at Well #2 are not sufficient to explain the high concentrations at existing well SWL0054, the Gage well will be relocated. The alternate location will be discussed with and approved by EPA prior to initiating drilling of the well.

## 3.2 BENZENE PLUME

Existing water table data indicate the presence of NAPL and/or high concentrations of dissolved benzene and other aromatic VOCs in the southeastern portion of the former rubber plant, near temporary well points CWL0051, CWL0027 and CWL0028 (Figure 6). However, there are no data for the underlying MBFB/MBFC (merged unit) in this area, and thus the vertical extent of the benzene plume is uncertain. An MBFB/MBFC monitoring well (Well #3) at the location indicated on Figure 7 is therefore proposed to address this data gap.

Groundwater samples from Well #3 will be collected following the procedures described in the FSP (Appendix B) and analyzed for VOCs using EPA Method 8260B. It is anticipated that VOC concentrations will be relatively low or below detection limits based on conditions typical of most other plant site areas, and that additional wells will therefore not be necessary to further delineate the lateral or vertical extent of the benzene plume in the merged MBFB/MBFC unit. If elevated VOC concentrations are detected, one or more additional MBFB/MBFC wells will be considered. As necessary, the number and locations of these wells will be reviewed with the regulatory agencies so that a consensus can be reached prior to initiating drilling.

During telephone discussions in May and June of 2004 with representatives of EPA and CH2MHill, and in a June 9, 2004 letter from EPA, the potential need for an additional MBFB/MBFC monitoring well near the southeastern corner of the former plant site was discussed. The purpose of the potential well was to evaluate whether dissolved benzene

contamination from a source area near existing well XMW-03HD (Figure 6) had migrated vertically into underlying HSUs. However, existing data indicate benzene concentrations at MBFB well SWL0023 are consistently below detection limits in this area. Therefore, vertical migration of benzene does not appear to have occurred, and additional characterization in the underlying HSUs is not necessary. In lieu of completion of a new MBFB well in this area, URS agrees to sample existing water table well SWL0021 for VOCs. Current VOC data for this well will allow confirmation that benzene does not extend further southward and offsite from the plant site source area than previously interpreted.

## 4.0 OVERVIEW OF FIELD PROCEDURES

The following sections present an overview of drilling, logging, well construction, groundwater sampling, and laboratory analytical methods to be employed during the field investigation. A comprehensive description of field procedures is presented in the attached FSP (Appendix B) and associated Standard Operating Procedures (SOPs; Appendix C).

### 4.1 DRILLING

All drilling will be conducted using mud rotary methods. Test holes will be drilled at each well location prior to well drilling to document subsurface conditions and allow for refinement of the well designs. A single test hole is planned for co-located Well #2 (MBFC) and Well #5 (Gage). The test hole for well #1 (water table) will be continuously cored from ground surface to total depth. The test holes for the remaining MBFC and Gage wells will be continuously cored from approximately 50 feet below ground surface (bgs) to total depth. Soil core from the test holes will be logged by a URS Geologist in accordance with Unified Soil Classification System (USCS) to identify changes in soil type and field evidence of contamination. Total organic vapor reading from the soil core, as measured with a calibrated photo-ionization detector (PID) will be recorded in the log.

### 4.2 GEOPHYSICAL LOGGING

A suite of geophysical logs will be completed for each test hole. Geophysical logging will be completed by either Barbour Well Surveying Corporation of Camarillo, California, or Norcal Geophysical Consultants Inc. of Petaluma, California. The purpose of the geophysical logging will be to obtain an objective log of subsurface conditions and allow fine-tuning of the exact well construction details with respect to the well screen and filter pack intervals. It is anticipated that natural gamma, 16- and 64-inch normal resistivity, single point electrical resistivity, and spontaneous potential (SP) logs will be completed. Following completion, the geophysical logs will be reviewed, and

adjustments made to the proposed well design, as necessary, based on the subsurface conditions encountered.

## 4.3 WELL CONSTRUCTION

Following completion of the geophysical logging, the boring for the associated monitoring well(s) will be drilled and the well(s) completed. Monitoring well locations will be within 10 feet of each associated test hole.

The anticipated designs for well #1 through well #5 are presented in Figure 8 through Figure 12, respectively. One or more conductor casings will be used at each MBFC and Gage well to minimize the potential for contaminants in upper intervals from being carried downward into the deeper units. All wells will be constructed with a combination string of 4-inch diameter, Schedule 80 PVC casing and 10 to 20 feet of well screen with 0.01-inch slots. The annular space between the well casing and the borehole will be filled with #1C sand or equivalent to form a filter pack from total depth to approximately five feet above the top of the well screen. Hydrated bentonite and neat cement will be placed in the annulus between the top of the filter pack to ground surface to form a sanitary seal. The top of the casing will be covered with a locking cap and traffic-rated protective cover that is flush with the ground surface.

The screen and conductor casing intervals for each well were selected based on the specific HSU for which groundwater data was desired and review of hydrogeologic cross sections presented in the Groundwater RI Report (Dames & Moore, 1998). The screen interval and associated rationale for each well is presented below:

| Well No. | HSU | Anticipated Screen Interval (ft. bgs) | Rationale |
|---|---|---|---|
| 1 | Water table (UBF/MBFB) | 46-66 | Screen will span water table and allow for rising groundwater |
| 2 | MBFC | 115-125 | Screen will be set at approximately the same hydrostratigraphic interval as screen at existing downgradient well SWL0054 |
| 3 | MBFB/MBFC | 95-110 | Screen will be set in the upper portion of the merged MBFB/MBFC |
| 4 | MBFC | 110-125 | Screen will be set at approximately the same hydrostratigraphic interval as screen at existing well SWL0054 |
| 5 | Gage | 168-183 | Screen will be set in the upper portion of Gage aquifer |

## 4.4 GROUNDWATER LEVEL MEASUREMENT, PURGING, AND SAMPLING

Two rounds of groundwater sampling will be completed for each of the new wells following their completion. The first round of sampling will be completed no less than one week after development of each well. The second round of sampling will be conducted within a two-week period after receipt of laboratory results from the first sampling round. An additional single round of sampling will be completed at existing water table well SWL0021 at the time of the second round of sampling for the new wells.

The groundwater level will be measured and each well will be purged prior to each sampling event. Purging and sampling will be accomplished with a dedicated submersible pump. Purging will continue until field measurements of water quality, including temperature, pH and turbidity are relatively stable and at least three casing volumes of groundwater have been removed.

Groundwater samples for VOC analysis will be collected into 40 ml vials, as supplied by the analytical laboratory. The appropriate type and number of sample containers are indicated in Table 1 along with preservative and holding time specifications. Upon collection, each sample will be immediately labeled and placed in a chilled cooler for temporary storage. The coolers will be transported to the laboratory at the end of each sampling day by same-day courier or overnight delivery service along with chain-of-custody documentation.

## 4.5 LABORATORY ANALYSES

Samples from each well will be tested for VOCs by EPA Method 8260B. Laboratory analyses will be completed in a manner to allow the lowest possible detection limit for each compound. To achieve this, sample dilution will be minimized to the extent possible without risking damage to the analytical equipment. For some samples, multiple analytical runs may be necessary, with results from each run being combined for reporting purposes in a manner that results in the smallest detection limit for each compound.

VOC analyses will be completed by Calscience Environmental Laboratories, Inc. (Calscience) of Garden Grove, California. Calscience is a state-certified laboratory for the planned analyses. Samples from proposed wells #2 and #3, and existing well SWL0021 will be analyzed on a 48-hour rush turnaround basis so that decisions regarding the need for and/or location of subsequent wells can be made in a timely manner.

## 4.6 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

QA/QC samples will be analyzed along with the primary samples to aid in subsequent evaluation of the data quality. QA/QC samples will include one duplicate sample and one trip blank sample for every individual shipment to the laboratory. Equipment blank samples will not be collected since sampling of all wells will be completed using a dedicated pump. The QA/QC samples will be prepared and handled identically to the primary samples, except as noted otherwise below and/or in the QAPP (Appendix D).

The duplicate sample will be collected simultaneous to collection of one of the primary samples, and will be labeled in a manner so that it is not readily identifiable as a duplicate by the laboratory. The trip blank samples will be pre-prepared by the laboratory and will accompany the primary sample containers at all times.

## 5.0 REFERENCES

D&M 1998 Final Groundwater Remedial Investigation Report (GWRI), Del Amo Study Area, May 15, 1998.

# APPENDIX A

# COMPILATION AND UPDATE OF OTHER SOURCES DATA REPORT AGENCY FILE REVIEW FOR PROPERTIES ADJACENT TO THE WESTERN BOUNDARY OF THE DEL AMO SITE DSGWRD 0936-010

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# APPENDIX A

# COMPILATION AND UPDATE OF OTHER SOURCES DATA REPORT AGENCY FILE REVIEW FOR PROPERTIES ADJACENT TO THE WESTERN BOUNDARY OF THE DEL AMO SITE DSGWRD 0936-010

## 1.0 INTRODUCTION AND BACKGROUND

Presented in this report is a summary of environmental data and other information compiled from State and local government agency files for properties located in what is referred to as the "Normandie Strip". As defined in Part I, Section 1.1.1 of the Statement of Work (SOW) attached to the Unilateral Administrative Order (UAO) for Initial Remedial Design Work (U.S. EPA Docket No. 2003-08), the Normandie Strip is defined as "a strip of land (located in Los Angeles County) bounded by 190th Street on the north, the western boundary of the former rubber plant on the east, the LADWP right-of-way on the south, and Normandie Avenue on the west." This area comprises approximately 56 acres (including streets) and includes 39 privately-owned, industrially-developed parcels (see Figure A-1 for parcel numbers, addresses, and locations).

This report addresses requirements set forth in Part I, Section 1.1.1 and of the SOW for submission of a Technical Memorandum that presents information compiled from agency files for sites and industrial/commercial operations located within the Normandie Strip, as well as areas within the boundaries of the former rubber plant, and areas of TCE groundwater contamination downgradient of the former rubber plant which originate from sources within the boundaries of the former rubber plant. Because this submittal also addresses requirements specified in Section 1.4 of the SOW for submission of a Data Compilation Report [DIN: DSGGWRD 0936-010], this document is referenced as such, rather than as a Technical Memorandum. As explained further below, agency files were not reviewed at this time for properties located within or downgradient of the former rubber plant.

## 1.1 PRIMARY TCE AND PCE PLUMES IN GROUNDWATER (WATER TABLE)

TCE and PCE in the water table zone are present in two distinct primary plumes, one of which is located along the western boundary of the former rubber plant, and the second located near the southwest corner the former plant site (see Figure A-2, modified from Figure 8 in the 2004 Baseline Groundwater Sampling Report (URS, 2004)). This second plume area is largely coincident with the chlorobenzene plume in the water table zone, and therefore is not part of the TCE plume as it is defined in the Dual Site Groundwater

ROD (EPA, 1999). Both of these chlorinated solvent plumes are believed to originate from sources located offsite and to the west of the former rubber plant where concentrations of both TCE and PCE in groundwater are known to commonly exceed 1000 ug/l in numerous monitoring wells.

## 1.2 TCE AND PCE WITHIN FORMER PLANT AREA AND OUTSIDE PRIMARY PLUME AREAS

Outside of the two primary plume areas, TCE has not been detected above its MCL (5 ug/l) in any of the water table monitoring wells located within the boundaries of the former rubber plant. PCE has been detected in relatively low concentrations but above its MCL (5 ug/l) in only two water table wells (SWL0016 and XP-02), located within the boundaries of the former rubber plant site (see Figure A-2, modified from Figure 9 in (URS, 2004). Both of these wells are located within the Benzene plume TI waiver zone established in the Dual Site Groundwater ROD. The most recent data for monitoring wells SWL0016 and XP-02 show PCE concentrations of 120 ug/l and 17 ug/l respectively (URS, 2004). The PCE plumes detected by these wells are inferred to be quite small and clearly do not extend into areas downgradient of the former plant site. These small plumes should have no significant impact on the remedy design for the chlorobenzene plume.

The sources of the PCE at wells SWL0016 and XP-02 (and the sources of both TCE and PCE detections in soil gas and soil at various locations within the boundaries of the former rubber plant) are unknown but are believed to be unrelated to former rubber plant operations. No evidence of chlorinated solvent usage at the former rubber plant was found during the extensive research performed as part of the site history investigation early during the Del Amo site RI (Dames & Moore, 1993; 1998). It is most likely that the occasional detections of TCE and PCE in soil and soil gas within the area of the former plant site result largely from more recent industrial activities on the site after the former rubber plant was closed and removed in approximately 1972. While chlorinated solvents have undoubtedly been used on the site since 1972, groundwater quality data from water table zone monitoring wells indicate that any incidental releases of these materials to the environment have apparently not resulted in significant groundwater impacts beyond that noted above at water table wells SWL0016 and XP-02.

Because chlorinated solvents are generally not detected at water table wells within the former rubber plant site outside of the two primary plume areas located along the western and southwestern boundaries of the former rubber plant, agency file reviews were not performed at this time for the more than 60 industrial/commercial developed properties now occupying the area of the former rubber plant. If it is later determined that file reviews for any of these parcels are needed or might be helpful in developing a better understanding of the TCE plume at the site, then those reviews will be undertaken at a

later date. Similarly, because neither of the two small PCE plumes noted above extend into offsite areas downgradient of the site, file reviews have not been performed at this time for offsite properties located downgradient of the site.

## 2.0 PURPOSE

The primary purpose of this report is to provide a compilation of the information acquired from agency files that relates to any documented soil or groundwater contamination, or past chemical usage on individual properties located within the Normandie Strip. Particular attention was paid to information in agency files that may indicate the presence of potential sources of soil or groundwater contamination by chlorinated solvents (TCE, PCE, etc.) and/or the past usage of chlorinated solvents on properties within the Normandie Strip. Where pertinent information was obtained for properties from agency files, an historical summary was prepared describing the industrial activities on properties chemical usage and when available pertinent findings from previous environmental investigations.

Preliminary information for properties located within the Normandie strip was obtained through an Environmental Data Resources (EDR) database report. In addition, requests for comprehensive file information for properties located within the Normandie strip were sent to various local and state agencies. Copies of pertinent site documents and information were obtained through file reviews conducted at these agencies and through discussions with agency personnel. Agency contacts and file reviews were conducted at the following agencies:

- CalEPA – Department of Toxic Substances Control (DTSC)
- Regional Water Quality Control Board – Los Angeles Region (RWQCB)
- Los Angeles County Department of Public Works (LADPW)
- Los Angeles Public Health Investigation (PHI)

URS made numerous inquiries and contacts to these agencies, and every reasonable effort was made to obtain relevant information; however, there may be instances that files or reports were not provided or otherwise made available to URS by the agencies during the review process. Presented in the following section is a narrative summary of the information acquired for specific properties during the agency file reviews and/or interviews with agency staff. The Map ID numbers noted in each narrative correspond to the property numbers, 1 through 39, as listed and plotted on Figure A-1.

## 3.0 SUMMARY OF FINDINGS

### 3.1 BRINDERSON CONSTRUCTORS INC. – 1208 WEST 190TH STREET

The property (Brinderson Constructors Inc.) located at 1208 West 190th Street (see Map ID #1 and/or #2) was identified in the EDR database report as a generator of "unspecified organic liquid mixture" waste. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.2 MAHAFFEY DRILLING CO. – 1210 WEST 190TH STREET

The property (Mahaffey Drilling) located at 1210 West 190th Street (see Map ID #2) was identified in files obtained from LADPW, as well as the EDR database. A report entitled, "Site Assessment Work Plan" prepared by CTL Environmental Services (dated 11/7/94) indicated that one 7,500-gallon gasoline UST, two 5,600-gallon diesel USTs, and two 1,100-gallon diesel USTs were removed at the property. Soil samples collected from westernmost 1,100-gal. diesel UST detected TPH (gasoline) up to 5,300 ppm and TPH (diesel) up to 3,900 ppm (BTEX up to 1,230 ppm). Based upon the results of their investigation, they recommended that further assessment of the UST area was necessary. However, the EDR database report indicated that "closure" was issued on 11/20/96. Copies of selected pages from this report are presented in Attachment 1.

The EDR database indicated that the facility generates waste oil and mixed oil. No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.3 TEXACO STATION – 19008 NORMANDIE AVENUE

The property (Texaco Station) located at 19008 Normandie Avenue (see Map ID #4) was identified in files obtained from LADPW and PHI, as well as the EDR database. Texaco has been present at this location since at least 1967. A septic tank and cesspools were present onsite in the late-1960s for sewage disposal. An industrial wastewater discharge permit was issued in 1969 that required wastes from floor washdown and maintenance pass through a sand and grease interceptor.

The following environmental investigations were identified:

- "Tank Removal and Site Investigation Report" (dated 5/17/88) by REF and Associates. Four 6,000-gallon USTs and one 550-gallon waste oil UST were removed. Contaminated soil was excavated and bioremediated. The report concluded

that the material was suitable for use as backfill and would not impair local groundwater conditions.

A "No further action" closure letter issued by LADPW (dated 12/12/88) for the former USTs.

- "Site Investigation Report – Texaco Service Station" (dated 2/6/89) by Texaco Environmental Services. No soil contamination was detected in the proposed tank installation area.

- "Site Investigation and Soil Excavation Report – Texaco Service Station" (dated 4/12/89) by Texaco Environmental Services. A cement septic tank was discovered while excavating for foundation footing. Removal of the tank, which had apparently been used at one time to dispose of waste oil, revealed visually discolored soil. The report concluded that since lab results for TPH were below action levels and minor soil contamination was confined to the septic tank area, local groundwater was not impacted. The contaminated soil was excavated and no further action was recommended.

- "Soil Sampling Report for Texaco Service Station" (dated 3/9/99) by Wayne Perry, Inc. Soil samples were collected during compliance upgrade activities. Benzene was not detected in any soil samples collected; TPH-G was detected in two samples to a maximum concentration of 6.9 mg/kg; TPH-D was detected in two samples to a maximum concentration of 182 mg/kg; and MTBE was detected in one sample at 0.070 mg/kg. The report requested that no further action be required. Copies of selected pages from the above report are presented in Attachment 2.

The EDR database indicated that the facility operates 5 USTs (gas, diesel, and waste oil). No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.4 GREENE'S READY-MIXED CONCRETE – 19030 NORMANDIE AVENUE

The property (Greene's Ready-Mixed Concrete) located at 19030 Normandie Avenue (see Map ID #3) was identified in files obtained from LADPW, as well as the EDR database. An industrial waste survey conducted in 1971 indicated that waste consisting of mixing tank rinse water and detergent was pretreated in a 3-stage rinsewater receiver and drainage sump. The effluent was then discharged to the 190th Street ditch. Industrial wastewater discharge requirements in 1975 allowed wastewater from concrete plant operations to drain to the Dominguez Channel via newer pretreatment facilities. These facilities consisted of concrete settling basins and two standard sand interceptors. A

stormwater inspection conducted in 1999 indicated that all stormwater flows into a pit/settling pond and is used in the process of making concrete.

The following environmental investigations were identified:

- "Final Report of Tank Closure and Remediation" (dated 1/18/90) by Healy Environmental. Two 10,000-gallon diesel USTs and approximately 786 tons of contaminated soil were removed from the facility. A new 12,000-gallon diesel UST was installed.

An inspector's report indicated that confirmation borings would have to be performed unless more information on the quantity and location of the excavation could be obtained.

- "Results of Additional Exploration and Soils Tests at Tank Closure Remediated Site" (dated 4/26/91) by Hallmark Petroleum. Soil samples indicated non-detect for TPH in the vicinity of the former excavation.

Case closure was issued for the former USTs in 1991.

Copies of selected pages from the above reports are presented in Attachment 3.

The EDR database indicated that the facility operates two 10,000-gallon diesel USTs and generates "tank bottom waste." No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.5 PERMA-BILT INDUSTRIES – 19106 NORMANDIE AVENUE

The property (Perma-Bilt Industries) located at 19106 Normandie Avenue (see Map ID #5) was identified in the EDR database report as a small quantity generator with no violations noted. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.6 TYLAN CORPORATION – 19220 NORMANDIE AVENUE

The property located at 19220 Normandie Avenue (see Map ID #7) was identified in files obtained from LADPW and DTSC, as well as the EDR database. Tylan Corporation (Tylan) was reportedly in operation between 1975 and 1981 and produced gas flow measuring equipment. Primary waste streams included acid (for cleaning quartz equipment) and detergent. Acid was neutralized upstream to the clarifier and discharged into the sewer system (2,500 gallons/day). A DHS "Preliminary Assessment Summary"

(dated March 1984) recommended that DTSC take no further action. The 1984 report also mentioned that waste acid (two barrels) and some freon were stored at the facility, although reportedly very little waste was generated. The painting was contracted out and solvents and acids were recovered. According to a 1976 industrial wastewater reporting form, wastewater sampling results for chlorinated hydrocarbons were non-detect.

Lamps, Inc. was a previous tenant at the facility in the late-1960s and early-1970s. Industrial waste surveys conducted in 1969 and 1971 mentioned that the facility had a small tin and gold plating operation associated with manufacture of miniature lamps. Industrial wastewater consisted of acid rinse water from a 7.5-gallon plating tank. The rinse water contained small amounts of gold, cyanide, phosphoric acid, nitric acid, hydrochloric acid, hydrofluoric acid, and sodium carbonate. Also, the surveys noted that all waste acids and solvents were collected in a 50 gallon drum and legally disposed. An industrial waste discharge permit was issued in 1972 and a 750-gallon sand/grease interceptor was installed at the facility.

Prentiss Properties Ltd., a more recent tenant, was involved with electronics distribution and had no wastewater discharge. Computer Image Systems is another recent tenant identified in the EDR database report.

The EDR database indicated that the facility generates or has generated various waste streams. No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.7 19500 NORMANDIE AVENUE

The property located at 19500 Normandie Avenue (see Map ID #11) was identified in files obtained from LADPW, as well as the EDR database, under various names. These names include Ecology Control Industries (ECI), Smith Tech Corp. (STC), and Lawson Enterprises, Inc.

Lawson Enterprises appears to have utilized the site from the early 1960s until the 1980s or potentially more recently. However, it appears that based on records provided by LADPW and EDR, Lawson Enterprises has also owned or operated the adjacent property located at 1227 Knox Street (see Section 3.9). Since these two properties were owned or operated by the same entity at some point, many of the regulatory records appear to be commingled. Therefore, it is uncertain as to which records belong to which specific property. According to LADPW files, a report entitled, "Hazardous Materials Underground Storage Closure Report" by Enviropro, Inc. (dated 8/8/86), indicated that three 5,000-gallon USTs were removed from the facility (Lawson Enterprises) in 1986. Copies of selected pages from this report are presented in Attachment 4. From 1962 to

1985, the tanks were used by several operators to store reclaimed solvent wastes (including paint thinner) as part of aerosol paint manufacturing and paint packaging operations. Contaminated soil was removed and the tank pit was backfilled with clean soil. The tank removal operation was overseen by LADPW and the LA County Fire Department. In addition, according to the EDR database, the Lawson facility is listed on the Cortese database and is/was involved with aerosol paint manufacturing and packaging. It also stated that approximately 14 USTs and 5 ASTs are/were used to store a variety of raw materials and wastes, although this may refer to both the Normandie Avenue and Knox Street addresses.

The EDR database identified the facility as a small quantity generator. Numerous hazardous materials and wastes were identified for ECI and STC. It is worth noting that one of the materials identified was listed as "liquids with halogenated organic compounds greater than 1,000 mg/l." Also, a notice of violation was issued to ECI in 1999 for allowing equipment wash water to flow onto Knox Street and into the gutter. No additional information was obtained from the agency file reviews.

### 3.8 DOUBARN SHEET METAL – 1205 KNOX STREET

The property (Doubarn Sheet Metal) located at 1205 Knox Street (see Map ID #8) was identified in files obtained from PHI. According to business plans on file for 1993 and 1994, Doubarn was a manufacturer of food service equipment. The plans also made note of a waste oil container outside of the shop. A miscellaneous file sheet of unknown date referenced operations onsite that included welding, laminating formica, and fabricating stainless steel and there were no painting operations.

No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.9 THE PRIETIVE GROUP – 1227 KNOX STREET

The property (Prietive Group) located at 1227 Knox Street (see Map ID #9) was identified in files obtained from LADPW, as well as the EDR database. As discussed previously in Section 3.7, 1227 Knox Street and 19500 Normandie Avenue were owned or operated by Lawson Enterprises in the past. Therefore, it is uncertain as to which records pertain to which specific property. According to a report entitled, "Report on Compliance with the Underground Tank Leak Monitoring Regulations and Guidelines of Los Angeles County," by Enviropro, Inc. (dated 1/7/86), 11 USTs were removed from the facility. These USTs had a capacity of 7,500 gallons each and contained isopropanol, naphtha, toluene, standard paint thinner, gasoline, xylene, keltrol, Resin #5306, Lustrasol, and Resin #5150. No significant soil contamination was found during the investigation.

Copies of selected pages from this report are presented in Attachment 5. LADPW issued a closure permit in 1986 recommending no further action.

The EDR database identified the facility as a generator of "other organic solid waste." No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.10 PASCO CORPORATION OF AMERICA – 19426 NORMANDIE AVENUE

The property (Pasco Corporation of America) located at 19426 Normandie Avenue (see Map ID #10) was identified in files obtained from LADPW. According to an IWDP issued in 1984, Pasco generated waste water (food waste) during cleaning of bakery area, including bakery equipment and utensils. A notice of violation was issued in 1990 because the IW facilities were not built according to approved plans. However, corrective action was taken and the facility obtained compliance.

No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.11 CROSSFIELD PRODUCTIONS CORP. – 19514 NORMANDIE AVENUE

The property (Crossfield Productions) located at 19514 Normandie Avenue (see Map ID #13) was identified in files obtained from LADPW, as well as the EDR database. According to LADPW records, a report entitled, "Tank Removal/Geologic Report" by H.H. Osterloh (dated 1/24/88) indicates that one 5,000-gallon gasoline UST was removed and soil samples revealed no contamination. Copies of selected pages from this report are presented in Attachment 6. A closure letter was issued by LADPW in 1990.

The EDR database identified the facility as a small quantity generator with no violations noted. No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.12 PACIFIC GATEWAY – 19524 NORMANDIE AVENUE

The property (Pacific Gateway) located at 19524 Normandie Avenue (see Map ID #17) was identified in the EDR database report as a small quantity generator of "oxygenated solvents" with no violations noted. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.13 ALPINE FOREIGN CAR SERVICE – 19530 NORMANDIE AVENUE

The property (Alpine Foreign Car Service) located at 19530 Normandie Avenue (see Map ID #14) was identified in the EDR database report as a small quantity generator of "oxygenated solvents" with no violations noted. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.14 TRICO INDUSTRIES – 19706 NORMANDIE AVENUE/1206 WEST 196TH STREET

The property (Trico Industries) located at 19706 Normandie Avenue/1206 West 196th Street (see Map IDs #21 and #15) was identified in files obtained from RWQCB, LADPW, and DTSC, as well as the EDR database. The former Trico site manufactured paint and well completion equipment and was a subsidiary of PACCAR, Inc. The subsidiary was sold in 1997 at which point the western portion of the facility (see Map ID #21) was sold to Mighty Enterprises and the eastern portion (see Map ID #15) was leased to Mighty Enterprises by PACCAR, Inc. The former Trico site is listed under 19706 Normandie Avenue and 1206 West 196th Street representing the western and eastern portions, respectively.

Prior to Trico, the facility was owned or operated by B&W, Inc. An IWDP was issued in 1978-79 and indicated that wastewater, consisting of water and biodegradable washing compound, was produced by washing company vehicles. As part of the wastewater system, a clarifier was utilized near the wash rack. The IWDP indicated that hazardous materials used at the facility consisted generally of paints and solvents. A notice of violation was issued in 1982 indicating that repairs to the rainwater diversion system were necessary. A 550-gallon unleaded gasoline UST was removed in 1987 and case closure was granted by LADPW.

According to a report entitled, "EPA Preliminary Assessment" by Roy F. Weston (dated 12/92), the most significant source of contamination (solvents) identified onsite was the former cesspool located on the southeast corner of the property. Highest PCE levels in soil were 3,070 ppb at 40 feet in the vicinity of the cesspool and 160 ppb of PCE in groundwater. Highest TCE levels in soil were 220 ppb at 65 feet bgs in the vicinity of the cesspool and 470 ppb of TCE in groundwater. Other potential sources of contamination identified onsite were the former steam cleaning and vehicle maintenance areas where toluene and methylene chloride were detected at 5 and 10 feet bgs. Solvents were also detected in the vicinity of the paint and solvent storage areas. A Preliminary Endangerment Assessment report was submitted to the DTSC in June 1995. The report

recommended additional soil investigations be conducted at the site and proposed two removal actions.

The site is currently used for the manufacturing of machinery for the aerospace industry. The RWQCB is the lead agency for soil and groundwater investigations. The site investigation is currently active.

The contaminants of concern for groundwater at the former Trico Site are VOCs, specifically 1,1,1-TCA, 1,1-DCE, 1,1-DCA, TCE, and PCE.

Site investigations have been conducted since 1987 only on the eastern portion of the former Trico Site (see Map ID #15). A total of 7 monitoring wells were installed in the upper Bellflower aquitard. Two of these wells, MW-1 and MW-2, were abandoned in 1998 because they were reportedly screened across two water-bearing zones. Site investigations have included both soil and groundwater sampling and laboratory analysis.

Well construction details have been compiled by H2Science and HartCrowser, Inc., and are provided in Attachment 7. Monitoring wells MW-1 and MW-2 were sampled five times from 1987 through 1995, monitoring wells MW-3 and MW-4 were sampled twice from 1995 to 2000, and monitoring wells MW-5, MW-6, and MW-7 were sampled once in 2000. Groundwater elevation data for 1987, 1995, and 2000 have been compiled by H2Science and HartCrowser, Inc. and are provided in Attachment 7. Groundwater flow in the upper Bellflower aquitard is reportedly to the south or southwest.

Supplemental site investigations were performed at the eastern portion of the former Trico facility (Map ID #15) in 2002 and 2003 by HartCrowser (HartCrowser, 2003). This recent work included the installation and sampling on an additional monitoring well (MW-8) completed in the Upper Bellflower Aquitard, as well as additional soil sampling in the vadose zone. A compilation of all known TCE and PCE soils data collected since 1987 by various consultants on the eastern portion of the former Trico facility is presented in an attached Table in Attachment 7. An accompanying Figure in Attachment 7 shows the locations of all these soil sampling points. The most recent concentrations of TCE and PCE in groundwater samples collected from monitoring wells on the eastern portion of the former Trico facility (HartCrowser and URS data), as well as adjacent areas including American Polystyrene Corporation (Map ID s #16 and #12) (URS data), and the western edge of the Del Amo site (URS data) are plotted on attached Figures also included in Attachment 7.

Finally, selected pages of text from Hart Crowser's December, 2003 report are reproduced and included in Attachment 7 to provide additional detail about what is

known regarding former industrial operations, owners and occupants of the former Trico facility property (Map IDs #15 and #21), the potential on-site and off-site sources of soil and groundwater contamination in the vicinity. Also included is text from HartCrowser's report providing a summery of previous environmental investigations performed on the eastern portion of the former Trico property (Map ID #15) by various consultants since 1987.

The EDR database identified the facility as a small quantity generator. The facility was also listed on the Leaking Underground Storage Tank (LUST) database as having a release of solvents from underground tanks. No additional information was obtained from the agency file reviews.

### 3.15 AMOCO CHEMICAL – 1225 WEST 196TH STREET

The property (Amoco Chemical Company) located at 1225 West 196th Street (see Map IDs #16 and #12) was identified in files obtained from RWQCB, LADPW, DTSC, and PHI, as well as the EDR database. Facility operations consisted of formulating polystyrene product using styrene monomer as a process raw material since 1962 (Brand Plastics). Raw materials used to make polystyrene were piped from Shell Chemical Company.

In the files review, URS identified numerous references via permits and correspondence regarding a dry well (35 feet deep) that was used at the facility in the 1960's. An IWDP was issued in 1962 which allowed Brand Plastics to use the dry well for discharge of once-through cooling water (0.5 gals/minute at times) associated with their plastic extruding machines. An industrial waste survey was conducted in 1964 referenced the onsite dry well as well as a septic tank for sewage. It also noted that an unlined process cooling sump has a capacity of approximately 12,000-gallons of water. Various inspector's reports were conducted between 1965 and 1967, which indicated that the sampling trap and receptors were clean. In the late 1960s, the facility ceased using the dry well and had it sealed and paved over. Amoco Chemical Company (Amoco) was then issued a notice of violation for connecting to the sewer line without proper approvals. Between 1971 and 1973, Amoco proposed to inject cooling water used for solidification of molten polystyrene strands into the local potable water aquifers. However, LA County Department of Health Services determined that this would have a deleterious effect on the aquifers and the proposal was rejected. As a solution, in 1974 Amoco installed a closed-loop process cooling water circulation system in order to eliminate the once-through cooling water discharge to the sewer system. An IWDP was obtained in 1974 for the bleed water (1,380 gals/day) from the closed loop cooling water system. Analytical results for industrial discharge conducted in 1974, 1991, and 1993 indicated no chlorinated compounds.

DHS conducted a Preliminary Assessment Summary in June 1986. Due to the fact that heavy metals and biocide constituents may be associated with cooling waters, staff recommended further characterization of the wastes and drywell (active status, low priority).

Various documented spills have occurred at the facility as observed in the files reviewed. Approximately 200-300 gallons of styrene monomer was ejected from a polymerization reaction vessel on August 1986. In August 1987, 1,500 lbs. of styrene monomer was spilled due to operator error. The material was contained on asphalt and cleaned up. A heating oil spill occurred onsite in August 1990, running onto an adjacent property and railroad, but was cleaned up.

Site investigations have been conducted since 1986 at the facility. In 1988, a voluntary soil sampling program was conducted by Amoco. Analyses indicated the presence of VOCs in the ppm range in shallow soils at some locations. Organic compound detected included styrene, ethylbenzene, PCE, TCE, toluene, benzene, TCA, and carbon disulfide. According to a report entitled, "Environmental Assessment Sampling and Analysis Report" by ENSR (dated July 1989), significant concentrations of PCE and TCE were detected in the tank farm area. Additional VOCs detected included styrene, ethylbenzene, and toluene. The vertical extent of VOC contamination was not determined in Tank Areas 1 and 2. A table summarizing the TCE and PCE concentrations in soil, as reported by ENSR, 1989 is included in Attachment 8. A figure showing the soil sampling locations on the Amoco facility is also included in Attachment 8.

A total of 6 monitoring wells were installed in the Upper Bellflower Aquitard. Well construction details and groundwater level data were not found during file review for the Amoco facility. The contaminants of concern for groundwater at the Amoco site were 1,1-DCE, 1,2-dichloroethylene (1,2-DCE), TCE, PCE, methylene chloride, and 1,1-dichloroethane (1,1-DCA).

The most recent concentrations of TCE and PCE in groundwater samples collected from monitoring wells on the former AMOCO site (collected by URS in 2004), as well as adjacent areas including the former Trico site (collected by HartCrowser in 2003 and URS in 2004), and the western edge of the Del Amo site (URS 2004 data) are plotted on attached Figures in Attachment 8.

A notice of violation was issued by LADHS in 1990, requesting disposal of a 55-gallon drum, copies of waste manifest for the drum, compliance with labeling and 90-day storage requirements, waste determination of roll-off bin containing soil, and proper clean up of all spilled heating oil (restoring to original condition). Lab results for the soil in roll-off bin were non-detect for VOCs but since it was contaminated with oil, disposed

of as California regulated waste. The soil apparently originated from tank farm construction at the facility.

Various hazardous waste manifests were identified (dated 1992-1993) for flammable liquid waste (styrene monomer), waste oil/water, RQ waste flammable solid (styrene), RQ waste flammable solid (styrene debris), and ethylene glycol and sorbent clay. A notation on the form stated that waste oil/water contains less than 1,000 ppm of halogenated compounds. Chemicals used onsite (1993) included styrene, nitrogen, mineral oil, and propane.

In May 1993, Amoco Chemical Co. was sold to American Polystyrene Corp. Based on hazardous waste manifests between 1998 and 2001, wastes generated at the facility included waste oil, styrene oil, and oily water. A 2002 hazardous material inventory indicated chemicals used onsite as propane, styrene, oxygen, waste oil, nitrogen, mineral oil, and acetylene. According to files reviewed, the facility has nine 10,000-gallon USTs onsite; eight containing styrene and one containing mineral oil.

The RWQCB has acted as the lead regulatory agency for soil and groundwater investigations. Site investigation does not appear to be currently active, however, no documentation to indicate that the site is closed was found during the file review for this site.

The EDR database identified the facility as a large and small quantity generator of "organic monomer waste", "waste oil and mixed oil", "unspecified aqueous solution", and "unspecified oil-containing waste." No additional information was obtained from the agency file reviews.

### 3.16 REDMAN EQUIPMENT AND MFG. CO. – 19800 NORMANDIE AVENUE

The property located at 19800 Normandie Avenue (see Map ID #26) was identified in files obtained from LADPW, as well as the EDR database. Redman Equipment and Manufacturing Company (Redman) manufactures new heat exchangers; and cleans and repairs used exchangers. According to an industrial waste survey conducted in 1981, wastewater at the facility is generated from hydro-testing used refinery or chemical plant exchangers and washdown of the yard working area. An inspection of the facility in 1978 disclosed that Redman was discharging heat exchanger rinse waters containing pollutants to an unimproved drainage ditch at the rear of the property. An industrial wastewater discharge permit (IWDP) was obtained in 1978 and a rain diversion system, two settling tanks, a filter tank, sump, pump well, and sampling box were installed. Conditions of a 1979 NPDES permit state that intermittent discharge of rainfall runoff from process areas are commingled with heat exchanger hydrotesting and cleaning wastewaters and flow to a drainage ditch that is connected to the Dominguez Channel.

According to a report entitled, "Report on Tank Removal for Redman Manufacturing" prepared by W.W. Irwin, Inc. (dated 11/9/87) two 10,000-gallon USTs (containing diesel and gasoline) were removed. Soil samples from the gasoline UST pit were non-detect. Soil samples from the diesel UST pit revealed TRPH concentrations varied between 85 and 222 ppm. Copies of selected pages from this report are presented in Attachment 9. A work plan for an additional 40-foot boring in the vicinity of the former diesel UST, was submitted in 1995 to LADPW. It appears that as of 1999, the facility had one 10,000-gallon gasoline UST that is used for fueling trucks.

The facility is also listed under the name of Torrance Heat Exchanger Manufacturing and Repair. The EDR database identified the facility as a large quantity generator of "heat exchanger bundle cleaning sludge." The facility also generates "waste oil and mixed oil", "other organic solids", and "other inorganic solid waste." No additional information was obtained from the agency file reviews. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.17 GERON FURNITURE – 19808 NORMANDIE AVENUE

The property (Geron Furniture) located at 19808 Normandie Avenue (see Map ID #26) was identified in the EDR database report as a large quantity generator with no violations noted. Various types of wastes were identified, most notably "unspecified solvent mixture waste" and "liquids with halogenated organic compounds greater than 1,000 mg/l." No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations was indicated in the files reviewed for this facility.

### 3.18 CRESTLINE MILLS CARPET CO. – 1200 WEST FRANCISCO STREET

The property located at 1200 West Francisco Street (see Map ID #25) was identified in files obtained from LADPW, DTSC, and PHI, as well as the EDR database. Based upon records reviewed, it appears that Crestline Mills Carpet Co. (Crestline) owned or operated the facility from the 1960s through the 1970s. Various industrial waste surveys conducted in 1966 indicate that Crestline generated mostly liquid latex waste (150 gals/week) related to carpet manufacturing operations. One of these surveys noted an incident where latex waste was washed into a drainage ditch that flowed down toward Ironwood Avenue and into a complaintant's yard. An IWDP was issued in 1966 that covered wastes from operations. Another inspection report noted that the facility was vacant in 1978.

Hydro Rubber & Plastics appears to have owned or operated the facility from the 1980s through the 1990s. A hazardous materials survey was conducted in 1983, which referenced numerous hazardous chemicals in use at the facility. Some of the raw

materials included natural rubber, nitriles, neoprenes, silicones, kerosene, MEK, toluene, and xylene. Various solvents were listed by trade name, some of which include 1,1,1-TCA as components. The survey also noted that xylene and PCE were used in the spray booth. A violation was issued in 1983 by DHS for the discharge of hydraulic oil (from a leaking compressor) to a ditch near Francisco Street. DHS required that the hazardous waste and contaminated soils be removed and properly disposed.

A hazardous materials survey was conducted in 1991, which noted that 1,1,1-TCA was used in burring operations and also for cleaning metal parts (tank located within building). It also mentioned that new drums of 1,1,1-TCA were stored indoors, while waste solvent and oils were stored in an outside drum storage area. A notice of violation was also issued in 1991 for incidental oil spillage to ground storage areas (behind hydraulic system tank) and need to legally dispose of 55-gallon drums of 1,1,1-TCA and mixed waste stored indoors. These violations were apparently corrected.

By 1993, Hydro Rubber was no longer in operation and in 1994 the facility was occupied by EB Industries/Oceanways Division, a non-generator of hazardous waste. However, according to a report entitled, "Environmental Investigation" by Dames & Moore (dated May 1994), soils with chlorinated solvent contamination were excavated from under a concrete pad on the west side of the main building. Soil samples from beneath the former pad area indicated TCA concentrations up to 108 ppb (3.5 feet bgs) and 1,1-DCA concentrations up to 195 ppb (3.5 bgs). Following excavation, confirmation samples indicated TCA and DCA concentrations were below lab detection limits. The excavated area was backfilled with clean fill material and 65 tons of stockpiled soil were transported offsite. A letter from the DTSC (dated 2/27/95) stated that "no further action" was warranted at the site. Copies of selected pages from the 1994 investigation are presented in Attachment 10.

The EDR database identified the facility as a small quantity generator with no violations noted. No additional information was obtained from the agency file reviews.

### 3.19 CORCOM – 1201 WEST FRANCISCO STREET

The property located at 1201 West Francisco Street (see Map ID #28) was identified in files obtained from LADPW and PHI, as well as the EDR database. Based upon records reviewed, it appears that Menardi & Company (later Menardi Southern) owned or operated the facility from the mid-1960s through the late-1980s. Menardi & Company used to the facility to process fiberglass fabrics and onsite equipment included padders, dip tanks, wash sinks, lab sinks, and deionizers.. Discharges consisted mainly of dyestuff and water-based silicones. According to an IWDP issued in 1966, the permit covered day-end process tank washdown and neutralized solutions from regeneration of the deionizers. In 1977, Menardi Southern was issued an IWDP which indicated that

wastewater producing operations consisted of slurry from graphite coating waste from padding operations. The constituents of discharge were primarily graphite and solids were pumped from the trap on a regular basis. According to an inspection report conducted in 1980, Menardi Southern produced fiberglass filters for air pollution control equipment. It also stated that industrial discharges were neutralized with NaOH treatment and discharged to the sewer via underground interceptor. The sludge was vacuum pumped on occasion and hauled away. A variety of chemicals were used at the facility, however, most were identified by trade names of unknown content.

Corcom, a manufacturer of electronic filters, appears to have owned or operated the facility in the early-1990s. According to records reviewed, filters were usually cleaned with 1,1,1-TCA in a vapor degreaser or manually. An IWDP was issued in 1989 which noted that operations included washing metal cabinets to remove the preserving oils. Constituents of the wastewater discharge were oils, soap, and residual metal shavings from cabinet fabrication. A 3-stage clarifier was installed as part of Corcom's operation. Concurrently, an older 500-gallon clarifier was removed from the facility in 1989. According to a report entitled, "UST Closure Report" by MSE Environmental (dated 1/29/90), the clarifier was removed and post removal sampling was conducted. The report concluded that concentrations found in the samples were of expected soil background levels due to the past history of oil production in the area. Copies of selected pages from this report are presented in Attachment 11.

A final closure letter was issued by LADPW in 1990. A hazardous waste survey was conducted in 1991, which noted that the facility utilized a solvent tank (1,1,1-TCA) for degreasing and that waste went to a recovery still. The survey mentioned that there were no documented disposal of still bottoms. Miscellaneous containers of 1,1,1-TCA were identified and a notice of violation was issued for routine storage and handling violations. Corrective actions were apparently taken by the facility.

Masterpiece Accessories, Inc., which manufactures and decorates pottery, has owned or operated the facility since 1995. According to records reviewed, the previous IWDP was voided since Masterpiece was exempt from industrial waste permitting. However, a new IWDP was issued in 2001-2002 for liquid waste associated with washing out paint brushes and spraying equipment. Apparently, only latex and acrylic-based paints are used in the manufacturing process.

The EDR database mentioned that Corcom generated "unspecified solvent mixture waste" and "unspecified oil-containing waste." It also identified Masterpiece as generating "oil/water separation sludge." No additional information was obtained from the agency file reviews.

## 3.20 PULSE INSTRUMENTS – 1234 WEST FRANCISCO STREET

The property (Pulse Instruments), a manufacturer of electronic test equipment, located at 1234 West Francisco Street (see Map ID #29) was identified in files obtained from PHI, as well as the EDR database. An inspection conducted in 1998 noted the presence of one 55-gallon drum of spent fluorinated solvent and minor violations for documentation and storage of materials. Records later that year indicated that solvent waste generation had ceased at the facility. According to an inspection report (dated 6/26/01), operations included the use of solder (tin/lead mixture) and fluorinated solvent (spray can) applied to electronic boards. The boards were washed over containerized units. The report also documented the disposal of 54 gallons of 1,1,1-TCA in 1999.

The EDR database identified the facility as a small quantity generator of "halogenated solvent with no violations noted. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations was indicated in the files reviewed for this facility.

## 3.21 QUANTRAD CORP. – 19900 NORMANDIE AVENUE

The property located at 19900 Normandie Avenue (see Map ID #27) was identified in files obtained from LADPW, as well as the EDR database. Based upon records reviewed, it appears that Ray Burns, Inc. owned or operated the facility in the 1960s. According to an IWDP issued in 1966, Ray Burns, Inc. operated a printing and lithography business. Liquid waste discharge (approximately 20 gal/day) consisted of rinse water from plate making, film developing solutions, and roller wash-off into a 338-gallon clarifier. A notice of violation was issued to TRW Systems, Inc. in 1970 to repair a broken elbow in the clarifier.

Quantrad, a manufacturer of optical and nuclear sensors, appears to have owned or operated the facility from the late-1970s until the early-1990s. According to an IWDP obtained in 1978, various acids and solvents (acetone, methanol, TCE, and xylene) were used for cleaning. Wastewater operations consisted of rinsing semi-conductors with deionized water, containing trace quantities of acids and solvents. According to an industrial waste survey conducted in 1981, a three-compartment clarifier was installed by Quantrad. A notice of violation was issued in 1990, noting that excessive solids were present in the clarifier and the pH was outside established discharge limits.

JG Enterprises appears to have owned or operated the facility since the early-1990s. A non-use IWDP was obtained in 1993 indicating that no waste was discharged from the facility. In 2001, an industrial waste inspection indicated that the outdoor areas appeared clean and dry with no serious concerns. However, some old barrels and paint cans were

observed. A notice was issued to JG Enterprises in 2003, which indicated that the clarifier remained in a non-use state but was ¾ full of rainwater and had not been capped off.

The EDR database identified the facility as a small quantity generator with no violations noted. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations was indicated in the files reviewed for this facility.

### 3.22 GENTRY PACIFIC LTD. – 20008 NORMANDIE AVENUE

The property located at 20008 Normandie Avenue (see Map ID #30) was identified in files obtained from LADPW, as well as the EDR database. Based upon records reviewed, it appears that Permaglass owned or operated the facility from the mid-1960s until the early-1970s. According to an industrial waste survey conducted in 1966, Permaglass prepared plate glass for store windows and operations involved cutting, tempering, and polishing the glass. An IWDP issued in 1966 noted that grinding water and wash water with detergents were discharged to the sewer (approx. 300 gal/day). A notice of violation was issued in 1971 due to one-pass cooling water that was observed running from the facility to a gutter on Francisco Street.

In 1974, Guardian Industries obtained an IWDP for the facility. Wastewater from their operations contained ground glass and ceramic paint (approx. 2,400 gal/day). In addition, a 1,000-gallon clarifier was installed at the facility.

The EDR database identified the facility as being occupied by two tenants, M&M Book Bindery and Gentry Pacific Ltd. M&M Book Bindery was listed as a generator of "unspecified aqueous wastes." Gentry Pacific Ltd. was listed as a generator of various wastes, some of which include "unspecified aqueous solution", "latex waste", "unspecified oil-containing waste", and "unspecified solvent mixture waste." No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.23 LABEL SERVICE INC. – 20020 NORMANDIE AVENUE

The property located at 20020 Normandie Avenue (see Map ID #31) was identified in files obtained from LADPW, as well as the EDR database. According to an IWDP obtained in 1989, America Eagle Marine appears to have owned or occupied the facility from the late-1980's until the late-1990s but had no waste generating operations. However, the existing 1,000-gallon clarifier would be maintained for future use. Since no records exist for this site address prior to 1989, it is possible that the aforementioned clarifier pertains to the adjacent unit located at 20008 Normandie Avenue (see Section

3.22). An industrial waste inspection conducted in 1997 indicated that the occupant, Gentry Properties, had no industrial waste operations onsite and that the clarifier was in a non-use state. Brighton properties obtained ownership of the property in 1999. An industrial waste inspection conducted in 2003 indicated that liquid was observed inside the clarifier and corrective action should be taken per the IWDP.

The EDR database identified the facility as being occupied by Label Service, Inc., a generator of "oxygenated solvents (acetone, butanol, ethyl acetate, etc." No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.24 SONIC INDUSTRIES, INC. – 20030 NORMANDIE AVENUE

The property located at 20030 Normandie Avenue (see Map ID #32) was identified in the EDR database as being occupied by two tenants, Computer Image Systems, Inc. and Sonic Industries Inc. Computer Image Systems, Inc. was listed as a small quantity generator with no violations noted. Sonic Industries Inc. was listed as a generator of various wastes including "hydrocarbon solvents (benzene, hexane, Stoddard, etc.)", "liquids with halogenated organic compounds greater than 1,000 mg/l", "unspecified aqueous solution", "unspecified oil-containing waste", and "liquids with metals." No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations was indicated in the files reviewed for this facility.

### 3.25 CENTURY SHOWER DOOR CO., INC. – 20100 NORMANDIE AVENUE

The property (Century Shower Door Co, Inc.) located at 20100 Normandie Avenue (see Map ID #36) was identified in files obtained from LADPW, as well as the EDR database. According to a report entitled, "Report Sample Collection and Removal of One Underground Storage Tank" prepared by Excel Environmental and General Engineering (dated 6/25/96), a 3,000-gallon gasoline UST was removed from the facility in June 1996. The report concluded that results of soil analysis indicated that no additional soil investigation in the vicinity of the former UST was required. Copies of selected pages from this report are presented in Attachment 12. A closure letter for the former UST was issued by LADPW in 1996. According to two tank inspections conducted in 1999 and 2002, two double-walled 10,000-gallon gasoline USTs are present onsite.

No additional information was obtained from the agency file reviews or EDR database. No evidence of the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.26 ATLAS LIGHTING – 20200 NORMANDIE AVENUE

The property (Atlas Lighting) located at 20200 Normandie Avenue (see Map ID #38) was identified in files obtained from DTSC, as well as the EDR database. Atlas Lighting was identified in the EDR database report as a large quantity generator with no violations noted. An inspection conducted by DTSC during a drive-by of the facility in March 1983 found no indications of environmental concern.

No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.27 GRAINGER – 20210 NORMANDIE AVENUE

The property (Grainger) located at 20210 Normandie Avenue (see Map ID #38) was identified in the EDR database report as generator of hazardous waste. These wastes include, "contaminated soil from site cleanups", unspecified aqueous solution," and "other inorganic solids." No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.28 METRO TRUCK BODY, INC. – 1201 WEST JON STREET

The property (Metro Truck Body, Inc.) located at 1201 West Jon Street (see Map ID #33) was identified in files obtained from PHI. According to a hazardous waste survey conducted in 1982, listed chemicals onsite included hydraulic oils, lacquer, thinner, enamel, and linseed oil. Violations were noted for "paints and thinners to ground surfaces." Various business plans and hazardous materials inventories were identified between 1992 and 2002. These sources indicated the following chemicals in use onsite: paints, thinner, acetylene, and oxygen. The paints and related solvents were stored outside. Hazardous waste manifests listed paint-related liquids and solids as primary wastes generated. A county fire inspection report was conducted in 1998 which issued violations for accumulation of overspray on the floor, open hazardous waste containers, lack of labels, and exceedance of storage time limits. A similar violation of accumulation and labeling was issued in 2002.

No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.29 PRECISION WOOD PRODUCTS – 1207 WEST JON STREET

The property (Precision Wood Products) located at 1207 West Jon Street (see Map ID #34) was identified in files obtained from PHI. According to a hazardous waste survey conducted in 1983, the facility utilized oil stains and white glue.

No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

### 3.30 TANDUM – 1210 WEST JON STREET

The property located at 1210 West Jon Street (see Map ID #39) was identified in files obtained from LADPW, as well as the EDR database. According to an IWDP obtained in 1997, Sunbow Technologies, Inc. is a laundry detergent manufacturer which utilizes detergents, surfactants, sodium silicate, propylene glycol, sulfuric acid, acetic acid, citric acid, and soda ash. Wastewater is produced from floor washing, cleaning liquid blending tanks, sample washdowns, and water softener regeneration. Constituents of the wastewater consist of chemical oxygen demand, surfactants, and suspended solids. Also, the facility operates a 510-gallon clarifier that is connected to the sewer system.

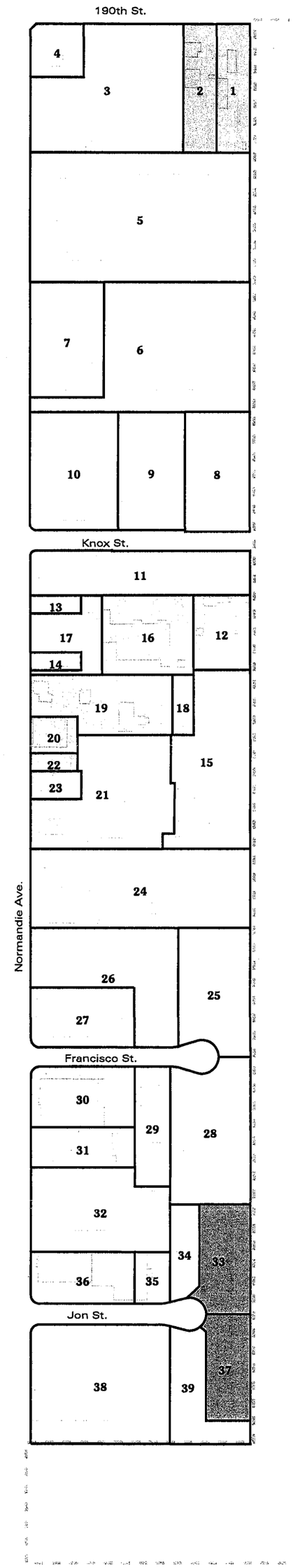
The EDR database identified the facility as being occupied by two tenants, Sunbow Technologies, Inc. and Tandum. Sunbow's permit status with LA County was listed as "closed." The database lists Tandum as generating oil/water separation sludge. No additional information was obtained from the agency file reviews. No evidence of previous environmental investigations or the use or disposal of chlorinated solvents was indicated in the files reviewed for this facility.

# TABLE A-1
## SUMMARY OF FILE SEARCH RESULTS, HISTORIC CONTAMINATION, AND CHLORINATED SOLVENT USAGE/DISPOSAL

| | | | File Search Results | | | | | Historical Contamination | | Evidence of Chlorinated |
|---|---|---|---|---|---|---|---|---|---|---|
| ID | APN# | Property Street Address | EDR | DTSC | LADPW | RWQCB | PHI | Soils | Groundwater | Solvent Usage/Disposal |
| 1 | 7351-030-001 | 1206 W 190 ST | | | | | | | | |
| 2 | 7351-030-002 | 1208 W 190 ST | √ | | | | | | | |
| | | 1210 W 190 ST | √ | | √ | | | Yes | | |
| 3 | 7351-030-003 | 19030 NORMANDIE AVE | √ | | √ | | | Yes | | |
| 4 | 7351-030-004 | 19008 NORMANDIE AVE | √ | | √ | | √ | Yes | | |
| 5 | 7351-030-005 | 19106 NORMANDIE AVE | √ | | | | | | | |
| 6 | 7351-030-011 | 19218 NORMANDIE AVE | | | | | | | | |
| 7 | 7351-030-010 | 19220 NORMANDIE AVE | √ | √ | √ | | | | | |
| 8 | 7351-030-007 | 1205 KNOX ST | | | | | √ | | | |
| 9 | 7351-030-008 | 1227 KNOX ST | √ | | √ | | | | | |
| 10 | 7351-030-009 | 19308 NORMANDIE AVE | | | | | | | | |
| | | 19426 NORMANDIE AVE | | | √ | | | | | |
| 11 | 7351-035-019 | 19500 NORMANDIE AVE | √ | | √ | | | Yes | | Yes |
| | | 19506 NORMANDIE AVE | | | | | | | | |
| 12 | 7351-035-002 | | | | | | | | | |
| 13 | 7351-035-020 | 19514 NORMANDIE AVE | √ | | √ | | | | | |
| 14 | 7351-035-022 | 19530 NORMANDIE AVE | √ | | | | | | | |
| 15 | 7351-035-027 | 1206 W 196 ST | | | | | | | | |
| 16 | 7351-035-003 | 1225 W 196TH ST | √ | √ | √ | √ | √ | Yes | Yes | Yes |
| 17 | 7351-035-021 | 19520 NORMANDIE AVE | | | | | | | | |
| | | 19524 NORMANDIE AVE | √ | | | | | | | |
| 18 | 7351-035-008 | | | | | | | | | |
| 19 | 7351-035-007 | 19606 NORMANDIE AVE | | | | | | | | |
| 20 | 7351-035-024 | 19626 NORMANDIE AVE | | | | | | | | |
| 21 | 7351-035-026 | 19706 NORMANDIE AVE | √ | √ | √ | √ | | Yes | Yes | Yes |
| | | 1206 W 196 ST | | | | | | | | |
| 22 | 7351-035-025 | | | | | | | | | |
| 23 | 7351-035-011 | 19630 NORMANDIE AVE | | | | | | | | |
| 24 | 7351-035-018 | 20002 NORMANDIE AVE | | | | | | | | |
| 25 | 7351-036-017 | 1200 W FRANCISCO ST | √ | √ | √ | | √ | Yes | | Yes |
| 26 | 7351-035-015 | 19800 NORMANDIE AVE | √ | | √ | | | Yes | | |
| | | 19808 NORMANDIE AVE | √ | | | | | | | Yes |
| 27 | 7351-035-016 | 19900 NORMANDIE AVE | √ | | √ | | | | | Yes |
| 28 | 7351-035-017 | 1201 W FRANCISCO ST | √ | | √ | | √ | | | Yes |
| 29 | 7351-036-002 | 1234 FRANCISCO ST | √ | | | | √ | | | Yes |
| 30 | 7351-036-003 | 20008 NORMANDIE AVE | √ | | √ | | | | | |

# TABLE A-1
## SUMMARY OF FILE SEARCH RESULTS, HISTORIC CONTAMINATION, AND CHLORINATED SOLVENT USAGE/DISPOSAL

| | | | File Search Results | | | | | Historical Contamination | | Evidence of Chlorinated |
|---|---|---|---|---|---|---|---|---|---|---|
| ID | APN# | Property Street Address | EDR | DTSC | LADPW | RWQCB | PHI | Soils | Groundwater | Solvent Usage/Disposal |
| 31 | 7351-036-015 | 20020 NORMANDIE AVE | √ | | √ | | | | | |
| 32 | 7351-036-020 | 20030 NORMANDIE AVE | √ | | | | | | | Yes |
| 33 | 7351-036-011 | 1201 JON ST | | | | | √ | | | |
| 34 | 7351-036-010 | 1207 JON ST | | | | | √ | | | |
| 35 | 7351-036-008 | | | | | | | | | |
| 36 | 7351-036-019 | 20100 NORMANDIE AVE | √ | | √ | | | | | |
| | | 20120 NORMANDIE AVE | | | | | | | | |
| 37 | 7351-036-012 | | | | | | | | | |
| 38 | 7351-036-014 | 20200 NORMANDIE AVE | √ | √ | | | | | | |
| | | 20210 NORMANDIE AVE | √ | | | | | | | |
| 39 | 7351-036-013 | 1206 JON ST | | | | | | | | |
| | | 1210 JON ST | √ | | √ | | | | | |




## List of Parcels with Parcel Addresses and Owners (as of March 2003)

| | | | | |
|---|---|---|---|---|
| 1 | 7351-030-001 | 01206 | W 190 ST | MAHAFFEY,PATRICIA TR |
| 2 | 7351-030-002 | 01208 | W 190 ST | MAHAFFEY,PATRICIA TR |
| 3 | 7351-030-003 | 19030 | NORMANDIE AVE | GREENE,EDWARD P AND |
| 4 | 7351-030-004 | 19008 | NORMANDIE AVE | EQUILON ENTERPRISES LLC |
| 5 | 7351-030-005 | 19106 | NORMANDIE AVE | TWISSELMAN,KENNETH C II TR ET AL |
| 6 | 7351-030-011 | 19218 | NORMANDIE AVE | PRENTISS PROPERTIES REAL |
| 7 | 7351-030-010 | 19220 | NORMANDIE AVE | PRENTISS PROPERTIES REAL |
| 8 | 7351-030-007 | 01205 | KNOX ST | MAPA HOLDINGS CO LLC |
| 9 | 7351-030-008 | 01227 | KNOX ST | WEISELMAN,NATHAN AND LEA TRS |
| 10 | 7351-030-009 | 19308 | NORMANDIE AVE | PRENTISS PROPERTIES REAL |
| 11 | 7351-035-019 | 19506 | NORMANDIE AVE | DLANORYS INC |
| 12 | 7351-035-002 | | | AMERICAN POLYSTYRENE CORP |
| 13 | 7351-035-020 | 19514 | NORMANDIE AVE | CROSSFIELD PRODUCTS CORP |
| 14 | 7351-035-022 | 19530 | NORMANDIE AVE | WUERTENBURGER,HURBERT AND MARGIT |
| 15 | 7351-035-027 | 00206 | W 196 ST | PACCAR INC |
| 16 | 7351-035-003 | 01225 | W 196TH ST | AMERICAN POLYSTYRENE CORP |
| 17 | 7351-035-021 | 19520 | NORMANDIE AVE | WICKERT,MARGARET M TR ET AL |
| 18 | 7351-035-008 | | | WHITE,HORACE L TR |
| 19 | 7351-035-007 | 19606 | NORMANDIE AVE | WHITE,HORACE L TR |
| 20 | 7351-035-024 | 19626 | NORMANDIE AVE | RUSHER,GEORGE AND ELIZABETH TRS |
| 21 | 7351-035-026 | 19706 | NORMANDIE AVE | TSAI,PETER |
| 22 | 7351-035-025 | | | RUSHER,GEORGE AND ELIZABETH TRS |
| 23 | 7351-035-011 | 19630 | NORMANDIE AVE | RUSHER,GEORGE J CO TR |
| 24 | 7351-035-018 | 19800 | NORMANDIE AVE | NORMANDIE BRR PROPERTIES |
| 25 | 7351-035-017 | 01201 | W FRANCISCO ST | WATT,J SCOTT TR |
| 26 | 7351-035-015 | 19808 | NORMANDIE AVE | SCHNIX CORP |
| 27 | 7351-035-016 | 19900 | NORMANDIE AVE | N C PROPERTIES AND |
| 28 | 7351-036-017 | 01200 | W FRANCISCO ST | MORTON,FRANK AND SANDRA TRS |
| 29 | 7351-036-002 | 01234 | FRANCISCO ST | 1234 FRANCISCO LP |
| 30 | 7351-036-003 | 20008 | NORMANDIE AVE | LUCY,RICHARD E TR ET AL |
| 31 | 7351-036-015 | 20020 | NORMANDIE AVE | LUCY,RICHARD E TR ET AL |
| 32 | 7351-036-020 | 20030 | NORMANDIE AVE | TERRADA INVESTMENT CORP |
| 33 | 7351-036-011 | 01201 | JON ST | RIGALI,PHILIP W |
| 34 | 7351-036-010 | 01207 | JON ST | MOORE,STANLEY A |
| 35 | 7351-036-008 | | | SIEGEL ENTERPRISES LLC |
| 36 | 7351-036-019 | 20120 | NORMANDIE AVE | SIEGEL ENTERPRISES LLC |
| 37 | 7351-036-012 | | | RIGALI,PHILIP W |
| 38 | 7351-036-014 | 20200 | NORMANDIE AVE | AIRPORT PLAZA INC |
| 39 | 7351-036-013 | 01206 | JON ST | SURETY REALTY CO |



LEGEND

Site boundary
Streets and buildings

**6** Parcel with call-out number (see list above)

Each parcel with the light pink color shown above is separately owned by one unique owner. Other colors indicate multi-parcel owner (one owner per color for non-pink parcels).

N
W E
S

200 0 200 400 Feet

1"=300' (1:3600)

t:\del_amo\gis\incoming\parcels\parcels_from_assessor.apr

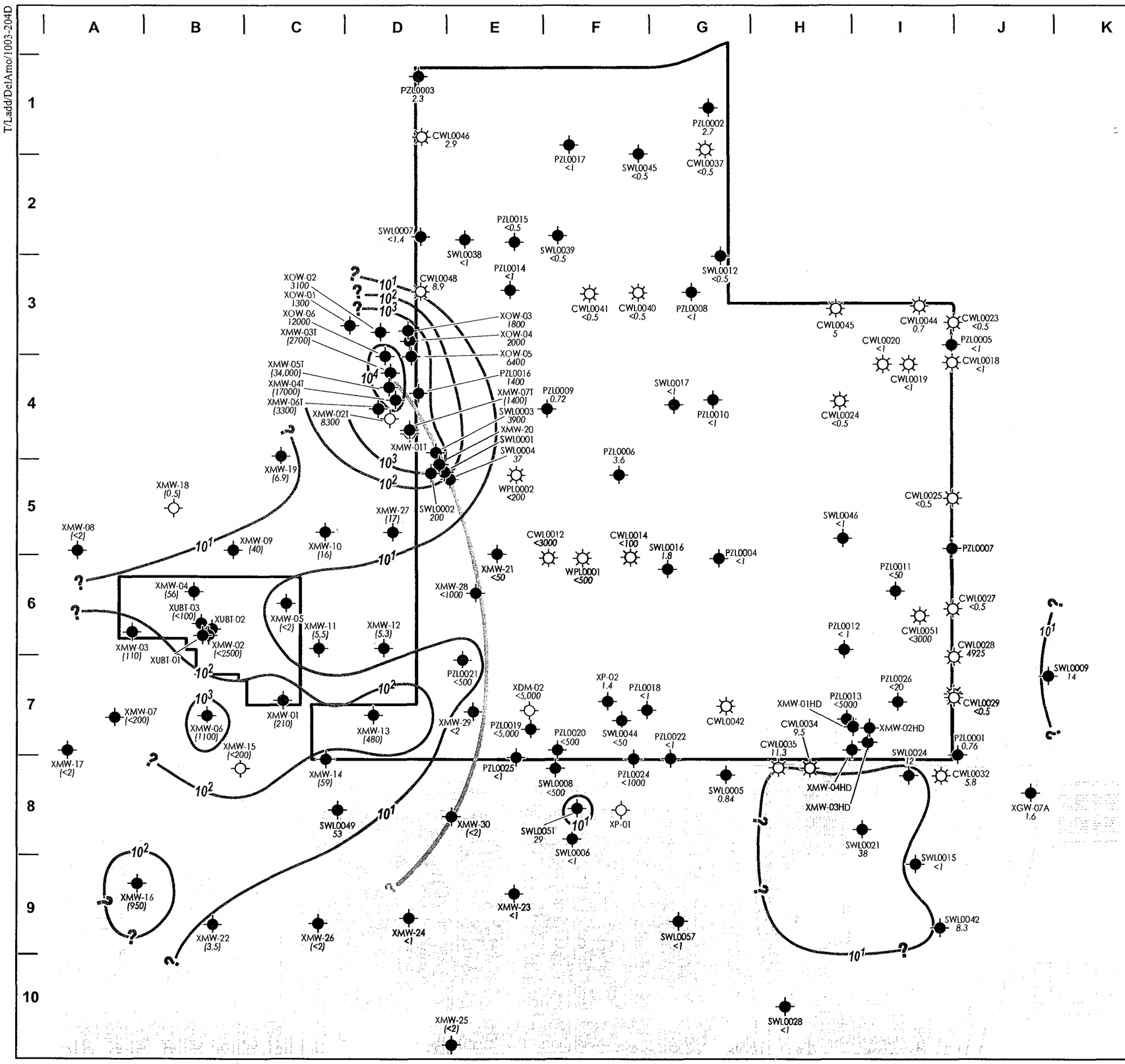
**Figure A-1**

Parcel Locations within Normandie Strip with Owners and Addresses

Del Amo Project

BOE-C6-0012722

T/Ladd/DelAmo/1003-204D




## Legend

PZL0011 <50 — Monitoring well with 2004 TCE concentration (µg/ℓ)

XDM-02 <5,000 — Destroyed monitoring well with most recent historical TCE concentration (µg/ℓ)

PZL0008 <1 — Monitoring well not sampled in 2004 with most recent historical TCE concentration (µg/ℓ)

CWL0025 <0.5 — Temporary well point with historical TCE concentration (µg/ℓ)

$10^1$ — TCE concentration isopleth. Queried where uncertain.

Inferred intersection of water table surface with top of middle Bellflower B sand. The overlying upper Bellflower aquitard is unsaturated west of the inferred intersection.

Note: Concentration data in parentheses generated by other investigators

FIGURE A-2

**DISSOLVED TCE CONCENTRATIONS WATER TABLE ZONE**

Del Amo Baseline Sampling
Groundwater Remedial Design

URS